Alternative Transportation Program Strategy Plan (March 2002)

Program Strategy Plan 2002 - 2006

Introduction:

Access to and within the national parks, whether by auto, bus, train, carriage, bicycle, or any other means of conveyance, has defined the national park experience for generations of visitors. Although train travel opened up many of the great western national parks to a visiting public, it was the advent of the automobile that would have the most profound effect upon the landscape.

As a newly formed agency at the turn of the 20th century, the National Park Service (NPS) gained its early public support through the provision of efficient access to the parks by roadways and rail systems. Designs of the roadways were sensitive to park resources, with special care exercised in fitting them to the land in an aesthetically pleasing way. In the construction of roads, it became clear that roads were much more than a mere necessity of conveyance or movement of people, but that they were an integral, defining feature of the national park experience. This design ethic surrounding transportation permeated subsequent transportation design efforts, giving rise to parkways, scenic byways, and other transportation-focused visitor experiences.

Access within our national parks has always been carried out in direct support of the NPS' mission to conserve resources and to provide for their enjoyment in such a way and by such means that leaves the parks unimpaired for the enjoyment of future generations. But the success of parks, the automobile, and park roadways has given rise to new problems. Parks are so popular and so accessible the increasing numbers of automobiles have stretched roadways beyond their limits and in some instances, have put the safety of pedestrians and bicyclists at risk. As a result, the NPS is faced with deteriorating and inadequate infrastructure, including its roads, trails, and transportation systems. Effects can be witnessed in potholed road surfaces, deteriorating bridges, and aging transit and watercraft systems. Visitor parking areas are routinely over capacity with cars, buses, and other vehicles spilling onto roadside shoulders and impacting vegetated areas. The resulting air pollution and other resource degradation, noise, congestion, wasted fuel and frustration experienced by park visitors significantly degrades the visitor experience as well. Unmanaged and uncontrolled, automobile use threatens significant park resources and the ability for visitors to enjoy them. The mission of the NPS is threatened.

From a resource conservation standpoint it is unacceptable, in many cases, to allow for additional resource impacts as a result of more roads and larger parking areas to accommodate more automobiles. Alternative means of transportation must be explored to provide access and a quality visitor experience, without additional adverse impacts to resources. Many parks have used alternative transportation systems (ATS) as a tool to achieve their mission and ultimately the mission of the NPS. ATS integrates all modes of travel within a park, including transit, bicycle and pedestrian linkages, and the automobile; and includes a whole range of technologies, facilities, and transportation management strategies. Many ATS incorporate transit systems to provide access, but it is reasonable to say that not all parks need to embark on a full-scale transit system and that managing the automobile, providing pedestrian and bicycle linkages and employing other management strategies is a part of this integrated approach. Alternative transportation recognizes the importance of roads, bridges and trails that support the use of alternative modes of travel. There are more than 95 National Park units with some form of ATS with 12 parks relying exclusively on ATS to access the park. Existing alternative transportation systems do and will continue to require improvement in their infrastructure, operations and integration in order to fulfill the mission of the NPS.

Purpose:
The Program Plan identifies the most important issues as identified by our internal and external stakeholders that need to be addressed in the next 5 years in order to improve existing alternative transportation systems and increase the number of parks that are served by alternative transportation systems. Because the ATP is in the early stages of development and lacks significant data and experience, the ATP plan is not intended to be a strategic plan, as those developed following the Government Performance and Results Act (GPRA) model. The goal in achieving the GPRA model is predicated on the systematic collection of performance measurement data for both the ATP and individual ATS'. This Program Plan provides guidance for a new program that needs a focus and direction in its early years.

Process:
The first meeting to initiate the development of the ATP Plan took place in June 2000. Subsequently, three other meetings were held with a small working group of people directly involved in the ATP. The process in developing this plan included the following: discussion of the desired outcomes and concerns about the process of developing the plan; the approach and format of the plan; an environmental scan and assessment including data on trends and indicators of change in micro and macro environments; an assessment of the opportunities and threats and strengths and weaknesses for the ATP; and, a review of legal mandates and authorities.

The challenges confronting the ATP based on the trends, opportunities, threats, strengths and weaknesses were identified and discussed resulting in eleven strategic questions. The working group then brainstormed ways to answer the strategic questions. From this, the strategies were narrowed down and refined to reflect the most pressing issues facing the ATP. Each strategy was discussed and the group brainstormed what the strategy would mean in practice and what the indicators would include. The

Regional Federal Lands Highway Program (FLHP) Coordinators then reviewed the resulting draft plan; they were individually interviewed, and their comments were incorporated into the plan.

The changes to the plan were then presented at a Servicewide Maintenance Advisory Committee subcommittee meeting held on June 24, 2001, in Washington, D.C. Each Regional FLHP Coordinator identified two parks to participate, and of those identified, only two parks, Grand Canyon and Sequoia/Kings Canyon, offered to review the Plan and be interviewed. Their input was incorporated.

The working group continued to refine the plan and reached agreement on the ATP's mission, ultimate goal, proposed strategies for the next three to five years and developed an overall action plan for each strategy. The plan was reviewed by NPS Management and then presented to external stakeholders to identify opportunities to work together to accomplish the plan strategies.

The external stakeholders meeting was held on October 24, 2001 involving nearly 50 persons from associations, foundations, conservancies, federal and state governments, public interest groups and citizens involved with our nation's parks. The purpose of the meeting was to identify opportunities for partnership between the NPS ATP and external organizations in the next several years in implementing actions in the following Program Plan. The meeting was facilitated by a management and organization consultant and followed a structured guide and operating principles for the group.

Mission Statement :
Preserve and protect resources while providing safe and enjoyable access to and within the national parks by using sustainable, appropriate and integrated transportation solutions.

This is achieved by:

- Planning, designing, implementing and improving multi-modal systems and solutions;
- Demonstrating environmental leadership in transportation;
- Partnering in the development of ATS for the mutual benefit of the NPS and interested parties;
- Participating in metropolitan and State transportation planning processes;
- Using transportation as a tool to educate and inform visitors about park resources and services; and
- Educating NPS personnel to effectively implement integrated transportation strategies.

Vision Specific Strategies:
All parks employ an integrated approach to visitor access and mobility using a combination of transportation technologies, facilities and management strategies to provide a range of mode choices to best preserve and protect resources while providing a pleasant visitor experience appropriate to the park and the community.

The following strategies were identified as the most important issues that need to be addressed in the next 5 years in order to improve existing alternative transportation systems and increase the number of parks that are served by alternative transportation systems. The proposed strategic topics include a description of what the strategy means, an action plan to accomplish over the next 5 years and measures of how the strategy has been achieved. Paramount in all strategies is that the NPS would not have ATS if resources and visitor experience were not threatened and that ATS is a tool to respond to those threats. Therefore, parks are encouraged to use an ATS, not only where resources and visitor experiences are threatened, but also where ATS can provide environmentally preferable access to the parks.

1. **Data collection and decision making:** Increase data available on: (a) resource conditions (monitoring both before and after implementation of ATS), (b) alternative transportation systems, and (c) travelers/visitors use of parks to improve decision making and ensure that actions taken in the development of ATS strive to protect resources and improve visitor experience.

Data that is available and reliable when developing ATS in the NPS is currently limited. This can affect the quality of decision making. The NPS needs consistent, quality data to optimize investments and to do integrated transportation planning that preserves and protects resources and improves the visitor experience. This strategy would coordinate data-gathering efforts between the AT Program and other programs or agencies within or outside the NPS. There is so much data that could be collected, it would also involve making careful, hard choices about which data is most essential in the short-term. There are several types of data that could be collected, including scientific (air, noise, water, and visual quality, soil erosion, wildlife, and ecosystems), engineering, socioeconomic and performance data, including visitor surveys.

Action Plan

FY 2002
Determine all of the data that needs to be collected, and what data is most essential and how to collect it with DOT partners.
Develop both program and system performance measures to evaluate the level of return on ATS investments.
Review the visitor use survey developed by the NPS Social Science office and determine if there is a specific question regarding transportation that should be included.
Seek the assistance of the NPS Social Science office to conduct a special nationwide study on visitor reaction to and acceptance of alternative transportation systems.

FY 2002 - 2003
Determine feasibility of establishing an automated data collection program.
Establish a uniform data collection and performance monitoring process that allows parks to choose measures that meet their goals.
Develop standard visitor surveys or visitor intercept surveys and determine if they can be pre-cleared by the Office of Management and Budget for use anytime.

Work with other NPS program areas, States, and other relevant sources to share information and data.

Develop a data collection process that allows projects in the out years to go into a coordinated, multi-year effort.

FY 2004
Develop simplified environmental measures that allow parks to determine resource benefits that were achieved through the ATS.

Measures of accomplishments:
Extent to which most important data identified in year one is available and used in decision making.

2. Capacity building at the local and regional level: Increase capacity at the local and regional level to plan and implement integrated alternative transportation systems.

This strategy focuses on improving the ability of those who will actually develop, implement and operate alternative transportation systems to do so more effectively. "Local" here is intended to refer both to parks and to the communities outside park boundaries. "Capacity" is intended to include all those things that together can support development and operation of alternative transportation systems, including staffing, organizational structure, funding, knowledge/skills/abilities and tools. This strategy consists of integrating, streamlining and networking activities to support local ability and includes three major components: 1a) planning and design, 1b) organizational structure and staffing, and 1c) funding.

2a) Planning and design: Improve planning and design of integrated ATS to (a) improve visitor experience and encourage greater visitor acceptance or use of the systems, and (b) prevent loss of resources, improve resource conditions (i.e. manage carrying capacity in parks).

This strategy ensures that integrated ATS in the NPS reflect the unique qualities of the park environments, represent a consistent level of quality, and provide the visitor with an acceptable and enjoyable means to travel to and within the park. Sustainable practices are considered in all aspects of NPS planning and design. For integrated alternative transportation systems, this includes environmental sensitivity in all phases of development; the use of non-toxic materials; resource conservation and recycling; the integration of the visitor with the natural and cultural setting; and affecting not only immediate behaviors, but also the long-term beliefs and attitudes of visitors. ATS in the NPS will be uniquely designed to meet NPS goals and will be incorporated into the context of the overall NPS planning framework.

NPS staff with limited knowledge of transportation planning and implementation are often the lead for a transportation project. They generally manage the project from

inception to implementation and interface with stakeholders and transportation consultants. The NPS field personnel needs basic training in all facets of integrated transportation systems. Field personnel will not be expected to become "experts" but should have access to NPS subject matter experts who can provide critical advice and information. This will allow them to effectively work with transportation consultants and other government agencies to accomplish transportation projects. The NPS can share with our partners the basic knowledge of the NPS culture and the history and consistency expected in park design with an emphasis that integrated transportation systems in the park environment are quite different from transit systems in an urban environment. There is also a need to acknowledge that ATS may not always be the appropriate solution and other visitor use management strategies may need to be utilized to protect resources.

Action Plan

FY 2002
Develop transportation planning and design principles, guidelines and standards for ATS (including standards for bicycling, pedestrian and emerging vehicle technologies).
Work with Volpe National Transportation Center to develop lessons learned for TEA-21 reauthorization efforts.
Work with other NPS program staff to develop a framework or approach to linking transportation planning to park general management plans, strategic plans, implementation plans, and annual performance plans.

FY 2003
Implement a program of training for NPS staff, consultants and other agencies and stakeholders on planning and design of integrated ATS. Include: understanding and using carrying capacity models; increasing State Department of Transportation involvement/coordination in projects to create relationships and partnering potential; the importance of including partners early in the process; managing multiple fund sources; the importance of estimating operations costs during project development and encouraging parks to seek a permanent increase in their operating base; and lessons learned.
Assess new and existing ATS, determine steps and resources needed to bring them in line with established standards.

FY 2004
Measure how well AT systems are meeting the principles, guidelines and standards.

FY 2005 - 2006
Work with new systems to ensure they meet the standards, and with existing systems to upgrade to meet the standards.
Assess and determine how to develop skills for visitor management, parking management, ticketing and reservation systems.
Measures of accomplishments

One hundred percent of new ATS improve resource condition and visitor experience by meeting established design principles, guidelines and standards.

Ten percent of existing systems that do not meet established design principles, guidelines and standards have been upgraded.

2b) Organizational Structure and Staffing Improve organizational structure and staffing to more effectively support work at the regional and local levels.

There are a limited number of people at the park level that exclusively deal with transportation issues. Most projects are initiated by a park employee, park rangers, maintenance workers, or superintendents, who champion an alternative transportation project, then gains the support of the rest of the park staff. They generally have to become experts in partnering and work towards building relationships with State and local stakeholders. The regions have assigned the FLHP Coordinators or others the collateral duty of dealing with ATP issues. To adequately address the needs of this highly complex program, additional staffing of transportation planning professionals may be required. At the national level, the organizational structure and staffing needs to be examined to ensure that it supports implementation of ATS and effectively supports work at the regional and local level.

Action Plan

FY 2002
Assess and develop a benchmark for organizational structure and staffing that plan and implement ATS throughout the NPS. Determine how the structure has supported work at the local level. Include the following elements: skills and abilities; communication; leadership; funding. Determine how satisfied people are with the different elements of the structure, what works, what are the concerns, what changes would you suggest? What does the NPS keep, what does the NPS change?

FY 2003
Expand the network of resources, both internal and external to the NPS, with identified knowledge and skills to provide expertise and advice that can be used Servicewide. Develop a way to update annually.
Identify optimal staffing and clarify the organizational structure that supports implementing the principles, guidelines and standards.

FY 2004
Re-examine organizational structure and staffing needs, identify gaps in structure and staffing.
Plan for addressing the gaps in structure and staffing.

FY 2005
Implement plan to address the gaps in structure and staffing.
Measures of Accomplishment

Reassess organizational structure and staffing changes 5 years later. Compare to benchmark.

2c) Funding: Optimize allocation of funding for (a) improving and supporting operations and maintenance of existing ATS (b) replacement of equipment, (c) developing new integrated ATS, and (d) discretionary use at the local level.

Independent of whether funding goes up or down, there is a need to ensure that the allocation of limited resources is optimized and dedicated to the greatest need. Currently, capital start-up money for integrated alternative transportation systems is available from the U.S. Department of Transportation through the FLHP, but these funds do not subsidize the operation of transit systems and replace an aging fleet or provide for the maintenance of bicycle and pedestrian trails. Transportation fees can be used by individual parks as a revenue source for operations and maintenance but they are sometimes inadequate in deferring all operations and maintenance cost and maintain reasonable costs to the user.

The NPS cannot currently use ATP (FLHP) funds specifically for operations or equipment replacement and there is a lack of this type of funding at the local, State or regional level. There is also an internal NPS policy not to spend ATP (FLHP) funds on recreational trails for bicycles and pedestrians. There is a need to either change eligibility criteria for FLHP or find additional funding sources outside of the NPS for operations, maintenance and capital replacement, and continue to expand funding in general. The NPS is advocating additional funding resources for trail improvements in the reauthorization of TEA-21. The ATP supports funding for trails connecting ATS activities. However, insufficient funding is available from the NPS (National Trail System program, Land Acquisition for Trails program and line item construction funds for just a few parks) and DOT (Recreation Trail Program). Locally, there is a need for flexibility in funding in order to address new issues as they arise and to participate effectively in local decision making. In a broader sense, this strategy is focused on ensuring that integrated ATS become viewed as a fundamental means of protecting resources and providing access in national parks to the American and visiting public.

Action Plan

FY 2002
Review and analyze AT Program funding availability.
Update guidance on sources and methods of transportation funding.

FY 2002 - 2003
Develop Partnership Guide.
Develop criteria and collect baseline data on all facilities and technologies related to ATS, e.g. replacement of transit and water-based vehicles, transit maintenance, capital improvements, trail linkages to ATS, intelligent transportation systems. Include the sources and amounts of funding, including backlog.

FY 2003
Explore and assess options to increase funding for operation maintenance and capital replacement and develop a plan. Options might include: obtaining a dedicated funding source for operations, maintenance and capital replacement; working with external stakeholders to support funding source proposals; exploring ways to utilize fund sources at the State and local levels for operations, maintenance and capital replacement; working internally with other programs to effectively combine funding sources; and documenting the cost to parks of managing multiple fund sources in order to compete for fewer, simpler funding sources.
Identify criteria for use of discretionary funds at the local level to provide parks with the flexibility to address new issues as they arise and participate effectively in local decision making and develop a system of allocating discretionary funds to regions.

FY 2004
Implement system of allocating discretionary funds to regions for use at the local level.
Develop guidance on sources and methods of new transportation funding.

Measures of accomplishments:
Monitor results and set measurable goals once baseline data is set.

3. Economic benefits and quality of life: Expand and demonstrate the contributions of ATS in terms of economic benefits and improving quality of life in parks and gateway communities.

It is clear that alternative transportation systems impact local communities and economies. It is important to demonstrate the ways in which alternative transportation systems add value to the park and community, in addition to improving the visitor's experience. Benefits, in fact, accrue at the local, national and global levels. These benefits include: a stronger local economy, increased health benefits, and improved recreational access, etc. This strategy overlaps significantly with data collection, because the NPS needs to show numbers at the project and macro-levels.

Action Plan

FY 2002
Work to develop a model to test the economic cost/benefits of national parks to local and regional economies.

FY 2004
Develop and implement a mechanism to share success stories and lessons learned by assessing what has and has not worked within gateway communities.
Interview residents and community leaders in gateway communities to see how they were affected by the implementation of an ATS.
Develop a methodology that parks can use to establish a baseline to measure impacts on economy and quality of life in parks and gateway communities

Measures of Accomplishments:
To be determined after methodology is established.

4. Environmental leadership: Demonstrate and promote environmental leadership in the ATP.

Environmental leadership is park management that demonstrates sound environmental stewardship by implementing sustainable practices in all aspects of NPS management and the active communication of these practices, along with their purposes and values, to park visitors, partners and stakeholders. Sustainable practices are generally incorporated into NPS planning and design as policy. This is intended to continue in all new alternative transportation projects as supported by the new design principles, guidelines and standards. A link needs to be made between what ATS accomplishes, choices the visitor makes and environmental impacts. The NPS environmental leadership is defined by actions that reach beyond compliance with environmental regulations. Integrated transportation becomes one sector where the NPS can tangibly achieve environmental leadership goals, by giving people who use alternative transportation in parks an experience and education that leads them to see things differently and changes their behavior when they return home.

Action Plan

FY 2002
Develop a media fact sheet.

FY 2003
Develop a list of ATS and supporting facilities that support environmental leadership.

Develop a national interpretive measure that shows how ATS supports the NPS mission and environmental leadership practices. Include a consistent message and guidance and/or options that link to the local interpretive story.

FY 2004
Develop and implement public outreach strategy to get the message across and have materials available including media and outreach.

Develop a simplified methodology to measure cost savings and reduced impacts to the environment, to be used by the parks.

Measures of accomplishments:
Increased numbers of visitors that are aware of environmental leadership and support it. Increased positive media response.